

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for generating a data stream according to a binary format of a tag-based description language, comprising:

tokenizing tag names into numeric tokens ~~for use in the data stream, wherein the numeric tokens are in incrementally consumable form by having the most significant bit of at least one token be designated as a continuation flag.~~

2. (Original) A method according to claim 1, further comprising:

tokenizing attribute names into numeric tokens.

3. (Original) A method according to claim 1, wherein said numeric tokens for tag names are variable sized.

4. (Original) A method according to claim 2, wherein said numeric tokens for attribute names are variable sized.

5. (Original) A method according to claim 2, wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream.

6. (Original) A method according to claim 1, wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream.

7. (Original) A method according to claim 1, wherein the tag-based description language is extensible markup language (XML).

8. (Original) A method according to claim 2, wherein the tokenizing of the tag and attribute names decreases the time elapsed parsing the data stream by a device that receives the data stream, the time being decreased relative to the parsing of a corresponding text-based format of the tag-based description language.

9. (Original) A method according to claim 2, wherein the tokenizing of the tag and attribute names decreases overhead incident to formatting data for representation according to the tag-based description language.

10. (Original) A method according to claim 2, wherein the tokenizing of the tag and attribute names decreases the size of the resulting data file formatted according to the tag-based description language.

11. (Original) A computer readable medium bearing computer executable instructions for carrying out the method of claim 1.

12. (Currently Amended) A computer readable medium bearing computer executable instructions for carrying out the method of receiving a well-formed document in a text format of a tag-based description language and converting the document to a binary format via tokenization of the tag and attribute names into numeric tokens, ~~wherein the numeric tokens are in incrementally consumable form by having the most significant bit of at least one token be designated as a continuation flag.~~

13. (Original) A computer readable medium according to claim 12, wherein said tokenization of attributes enables values natively stored as binary data types to be inserted into the data stream.

14. (Original) A computer readable medium according to claim 12, wherein said tokenization of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream.

15. (Original) A computer readable medium according to claim 12, said receiving includes receiving a document formatted according to a text format of XML.

16. (Currently Amended) A computer readable medium bearing computer executable instructions for carrying out the method of assembling data into a document according to a binary format by tokenizing the tag and attribute names into variable sized

numeric tokens, ~~wherein the numeric tokens are in incrementally consumable form by having the most significant bit of at least one token be designated as a continuation flag.~~

17. (Original) A computer readable medium according to claim 16, wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream.

18. (Original) A computer readable medium according to claim 16, wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream.

19. (Original) A computer readable medium according to claim 16, said receiving includes receiving a document formatted according to a text format of XML.

20. (Currently Amended) A computer readable medium bearing computer executable instructions for carrying out the method of receiving a document formatted according to a binary format of a tag-based description language, ~~wherein the document is consumed incrementally by having the most significant bit of at least one token be designated as a continuation flag,~~ and directly parsing the data in the document for use by another element in a computer system.

21. (Original) A computer readable medium according to claim 20, wherein before said parsing, said method includes converting the document to a text format of the tag-based description language.

22. (Original) A computer readable medium according to claim 20, wherein said receiving includes receiving a document formatted according to a binary format of XML.

23. (Currently Amended) A computing device, comprising:
means for receiving a well-formed document in a text format of a tag-based description language;
means for converting the document to a binary format via tokenization of the tag and attribute names into variable sized numeric tokens, ~~wherein the numeric tokens are in~~

~~incrementally consumable form by having the most significant bit of at least one token be designated as a continuation flag; and~~

means for converting the document back to the text format without a loss of fidelity.

24. (Original) A computing device according to claim 23, wherein said tokenization of attributes enables values natively stored as binary data types to be inserted into the data stream.

25. (Original) A computing device according to claim 23, wherein said tokenization of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream.

26. (Original) A computing device according to claim 23, said tag-based description language is XML.

27. (Currently Amended) In a system in which a transmitting device transmits in a streaming fashion data formatted according to a tag-based description language, a method for generating a data stream according to a binary format of the tag-based description language, comprising:

for each unique tag name, at the first time a tag name of the data is encountered, tokenizing the tag name into a numeric token and transmitting the token and the text associated with the tag name, ~~wherein the numeric tokens are in incrementally consumable form by having the most significant bit of at least one token be designated as a continuation flag; and~~

at any time subsequent to the first time that the tag name of the data is encountered, transmitting the numeric token without the text.

28. (Original) A method according to claim 27, further comprising:
tokenizing attribute names into numeric tokens.

29. (Canceled)

30. (Original) A method according to claim 27, wherein said numeric tokens for tag names are variable sized.

31. (Original) A method according to claim 28, wherein said numeric tokens for attribute names are variable sized.

32. (Original) A method according to claim 28, wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream.

33. (Original) A method according to claim 27, wherein the tag-based description language is extensible markup language (XML).

34. (Original) A method according to claim 28, wherein the tokenizing of the tag and attribute names decreases the time elapsed parsing the data stream by a device that receives the data stream, the time being decreased relative to the parsing of a corresponding text-based format of the tag-based description language.

35. (Original) A method according to claim 28, wherein the tokenizing of the tag and attribute names decreases overhead incident to formatting data for representation according to the tag-based description language.

36. (Original) A method according to claim 28, wherein the tokenizing of the tag and attribute names decreases the size of the resulting data file formatted according to the tag-based description language.

37. (Original) A computer readable medium bearing computer executable instructions for carrying out the method of claim 27.

38. (Currently Amended) A method for generating a data stream according to an XML binary format, comprising:

tokenizing tag names and attribute names into variable sized numeric tokens, ~~wherein the numeric tokens are in incrementally consumable form by having the most significant bit of at least one token be designated as a continuation flag,~~ wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data

stream, wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream, thereby decreasing parsing time.

39. (New) The method according to claim 27, wherein said data is transmitted incrementally, and whereby a receiving device parses said data as it is incrementally received by the receiving device.